

Appl. No. 09/996,115
Amdt. dated November 20, 2003
Reply to Office action of September 11, 2003

The listing of claims will replace all prior versions, and listings, of claims in this application:

Listing of Claims:

Claim 1 (canceled).

Claim 2 (canceled).

Claim 3 (canceled).

Claim 4 (previously amended): Method enabling a command to switch the measure mode to be entered in a dimension-measuring column provided with a probe tip,

wherein said command to switch the measure mode is entered by only making use of the position of said probe tip,

wherein said command to switch the measure mode is entered by pressing the probe tip against a piece to be measured during a time interval greater than a predetermined value,

wherein said mode switch command enables said measuring column to pass into a mode to search for the turn-back point of said piece to be measured.

Claim 5 (original): The method of claim 4, wherein the status of the display of said measuring column is modified following said mode switch so as to indicate the status of the pressing force of said probe tip against said piece to be measured.

Claim 6 (original): The method of claim 5, wherein said pressing force is indicated by means of a bar graph.

Claim 7 (original): The method of claim 4, wherein said measuring column remains in said turn-back point search mode as long as a sufficient pressing force is exerted by the probe tip against the piece to be measured, said turn-back point being determined automatically within the trajectory covered by said probe tip in said search mode.

Claim 8 (original): The method of claim 7, wherein said measurement of the turn-back point is not taken into account when said pressing force exceeds a predefined admissible interval.

Claim 9 (original): The method of claim 4, wherein said turn-back point is determined as being the extreme of the vertical trajectory covered by said probe tip in said search mode.

Claim 10 (original): The method of claim 4, wherein said turn-back point is validated only if the derivative of the probe tip's vertical position is close to zero at said extreme.

Claim 11 (original): The method of claim 4, wherein the area around the turn-back point is scanned several times in succession in opposite directions without the pressing force being released,

the measured turn-back point being validated only when the vertical position of several thereof finds itself within a determined interval.

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Claim 12 (canceled).

Claim 13 (canceled).

Claim 14 (canceled).

Claim 15 (original): Method for entering a command in a dimension-measuring column provided with a probe tip,
said command enabling said measuring column to pass into a mode to search for the turn-back point of said piece to be measured,
said command being entered only by pressing said probe tip against a piece to be measured during a time interval greater than a predetermined value.

Claim 16 (original): The method of claim 15, wherein a measurement of the probing point is effected when the probe tip is pressed against said piece to be measured during a time interval shorter than said predetermined value.

Claim 17 (canceled).

Claim 18 (canceled).

Claim 19 (canceled).

Claim 20 (previously amended): Dimension-measuring column, comprising:
a probe tip designed for being brought into contact with the piece to be measured,

a displacement mechanism of said probe tip,
a measuring and displaying system that allows the position of said probe tip to be determined and displayed, said measuring and displaying system being able to function according to several distinct modes,
wherein at least one of said measure modes can be selected by acting on the position of the probe tip, without any other handling operating being necessary,
wherein said measure mode can be selected by pressing the probe tip against the piece to be measured during a time interval greater than a predetermined value,
wherein the measurement of the probing point is effected when the probe tip is pressed against said piece to be measured during a time interval shorter than said predetermined value,
wherein said measure mode is a mode to search for the turn-back point of said piece to be measured.

Claim 21 (original): The measuring column of claim 20, comprising a display whose status is modified following said mode switch so as to indicate the status of the pressing force of said probe tip against said piece to be measured.

Claim 22 (original) The measuring column of claim 21, wherein said display enables a bar graph capable of indicating said pressing force.

Claim 23 (original): The measuring column of claim 22, wherein it remains in turn-back point search mode as long as a sufficient pressing force is exerted by the probe tip against the piece to be measured, said turn-back point being determined automatically within the trajectory covered by said probe tip in search mode.

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Claim 24 (original): The measuring column of claim 23, wherein said measurement of the turn-back point is not taken into account when said pressing force exceeds a predefined admissible interval.

Claim 25 (original): The measuring column of claim 24, wherein said turn-back point is determined as being the extreme of the vertical trajectory covered by said probe tip in said search mode.

Claim 26 (original): The measuring column of one of the claims 25, wherein said turn-back point is validated only if the derivative of the probe tip's vertical position is close to zero at said extreme.

Claim 27 (original): The measuring column of one of the claims 26, wherein, when the area around the turn-back point is scanned several times in succession in opposite directions without the pressing force being released, the measured turn-back point is validated only when the vertical position of several thereof finds itself within a determined interval.

Claim 28 (canceled).

Claim 29 (canceled).

Claim 30 (canceled).

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Claim 31 (currently amended): ~~Method according to claim 30;~~ Method enabling a command to switch a measure mode to be entered in a dimensional-measuring column provided with a probe tip,

wherein said command to switch the measure mode is entered by means of deliberate handling operations of a height-command crank,

wherein said command to switch the measure mode enables said dimension-measuring column to pass into a mode to search for a turn-back point of said piece to be measured.

Claim 32 (canceled).

Claim 33 (canceled).

Claim 34 (canceled).

Claim 35 (canceled).

Claim 36 (currently amended): ~~The dimension-measuring column of claim 35;~~ Dimension-measuring column, comprising:

a probe tip designed for being brought into contact with a piece to be measured,

a height-command crank for displacing said probe tip,

a measuring and displaying system that allows the position of said probe tip to be determined and displayed,

wherein a command to switch the measure mode is entered by means of deliberate handling operations of the height-command crank,

wherein said command to switch the measure mode enables a measuring column to pass into a mode to search for a turn-back point of said piece to be measured.

Claim 37 (canceled).

Claim 38 (previously added): The method of claim 4, wherein said command to switch the measure mode is entered by pressing the probe tip against a piece to be measured during a time interval greater than a predetermined value.

Claim 39 (previously added): The method of claim 38, wherein a measurement of the probing point is effected when the probe tip is pressed against said piece to be measured during a time interval shorter than said predetermined value.

Claim 40 (previously added): The method of claim 4, wherein an aural and/or visual signal is emitted during a said mode switch.

Claim 41 (previously added): The measuring column of claim 20, wherein said measure mode can be selected by pressing the probe tip against the piece to be measured during a time interval greater than a predetermined value.

Claim 42 (previously added): The measuring column of claim 41, wherein the measurement of the probing point is effected when the probe tip is pressed against said piece to be measured during a time interval shorter than said predetermined value.

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Claim 43 (previously added): The measuring column of claim 20, comprising
a loudspeaker to emit a sound signal during said mode switch.